

KOSTIN, M.I., inzhener.

~~SECRET~~
Use of earthmoving machinery in construction enterprises of the
coal industry. Mekh.stroi. 11 no.5:13-16 My '54. (MLRA 7:5)
(Earthmoving machinery)

SOKOLOV, K.M.; YEVSTAFYEV, S.V.; ROSTOTSKIY, V.K.; GRECHIN, N.K.; STANKOVSKIY, A.P.; BAUMAN, V.A.; BERKMAN, I.L.; BORODACHEV, I.P.; BOYKO, A.G.; VALUTSKIY, I.I.; VATSSLAVSKAYA, L.Ya.; VOL'FSON, A.V.; DOMBROVSKIY, N.G.; YRONUS, M.Ya.; YEFREMEENKO, V.P.; ZIMIN, P.A.; IVANOV, V.A.; KOZLOVSKIY, A.A.; KOSTIN, M.I.; KRIMERMAN, M.N.; LINEVA, M.S.; MERENKOV, A.S.; MIROPOL'SKAYA, N.K.; PETROV, G.D.; REBROV, A.S.; ROGOVSKIY, L.V.; SMIRNOV, G.Ya.; SHAFRANSKIY, V.N.; SHIMANOVICH, S.V.; SHNEIDER, V.A.

Evgenii Richardovich Peters; obituary; Mekh. stroi. 15 no.1:3 of cover
Ja '58. (MIRA 11:1)

(Peters, Evgenii Richardovich, 1892-1957)

14(2)

PHASE I BOOK EXPLOITATION

SOV/2862

Kostin, Mikhail Ivanovich, and Stanislav Vladimirovich Shimanovich

Ekskavatory; spravochnik (Excavators; Manual) 2nd ed., rev. and enl.
Moscow, Mashgiz, 1959. 523 p. 16,000 copies printed.

Reviewer: A.M. Verzhitskiy, Engineer; Ed.: R.M. Korableva, Engineer; Tech.
Ed.: A.F. Uvarova; Managing Ed. for Literature on General Technical and
Transport Machinery Construction: V.I. Kubarev, Engineer.

PURPOSE: This manual is intended for construction workers, workers in repair
and maintenance shops, tractor mechanics, and excavating-machinery operators.
It may also be useful to students of courses and schools which train con-
struction workers and machine operators.

COVERAGE: The book contains a brief description of the mechanical characteristics
of Soviet excavating machinery. Types of wheeled and crawler-tread tractors
and self-propelled machinery are listed. The equipment is listed according
to bucket capacity. Excavating machines are divided into the following
categories: machinery, trench-digging and land-improvement machinery, and

Card 1/6

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825220005-

Excavators; Manual

SOV/2862

transverse-action and walking-type excavators. Performance data and cost
estimates are presented. No personalities are mentioned. There are no
references.

Introduction

3

Single-bucket Construction Excavators

Excavator, E-153, for MTZ-2 "Byelarus" wheel tractor. Bucket capacity,
0.15 cubic meters

9

Excavators, E-252 and E-351, on crawler tracks. Bucket capacities, 0.25
and 0.35 cubic meters

14

Excavators, E-257 and E-352, on crawler tracks. Bucket capacity, 0.25
cubic meters. Excavator, E-301(E-258), on wheels. Bucket capacity,
0.25 cubic meters

34

Excavator, E-353 (E-255), on wheels. Bucket capacity, 0.35 cubic meters

68

Excavators, universal E-302, E-303, and E-304. Bucket capacity, 0.3
cubic meters

85

Excavators, E-504, E-505, and E-505A. Bucket capacity, 0.5 cubic meters.

Excavators, E-651 and E-652. Bucket capacity, 0.65 cubic meters

101

Card 2/6

Excavators; Manual

SOV/2862

Excavator, EVG-6, on crawler tracks. Bucket capacity, 6 cubic meters	264
Excavator, EGL-15, on crawler tracks. Bucket capacity, 15 cubic meters	276

Walking Excavators

Excavator, ESh-1. Bucket capacity, 3.4 cubic meters	295
Excavator, ESh 4/40. Bucket capacity, 4 cubic meters	305
Excavator, ESh 4/40 M. Bucket capacity, 4 cubic meters	318
Excavator, ESh-6/60. Bucket capacity, 6 cubic meters	320
Excavator, ESh-14/75. Bucket capacity, 14 cubic meters	326
Excavator, ESh-25/100. Bucket capacity, 25 cubic meters (Experimental model)	345

Multibucket Excavators With Transverse Action

Excavator, EM-182	353
Excavator, EM-201	360
Excavator, EM-302	369

Trenching Excavators, Chain-type

Excavator, ET-121	385
-------------------	-----

Card 4/ 6

Excavators; Manual

SOV/2862

Excavator, ETN-122	393
Excavators, ETN-141 and ETN-142	395
Excavator, ETN-251	410
Excavators, ETN-351 and ETN-352	420
Excavator, ETN-353	437

Rotary Trench Excavators

Excavators, ER-2, ER-4, ER-5, and ER-6	451
Excavator, ER-2	453
Excavator, ER-4	462
Excavator, ER-5	472
Excavator, ER-6	479
Excavator, ETR-152	489

Appendix

Work quotas for excavators	501
Indicative figures of costs for 8-hour operation of excavators	507
Work quotas for excavators	513
Reference material	516

Card 5/6

KOSTIN, Mikhail Ivanovich and SHIMANOVICH, S.V.

Soviet Excavators; excerpts by M.I.Kostin and S.V.Shimanovich. New York,
Joint Publications Research Service, 1960. (31) p (JPRS: 3004) Trans.
from the Original Russian: Ekskavatory: Spravochnik, Moskva, 1959.

~~KOSTIN, Michail Ivanowicz~~ [Kostin, Mihail Ivanovich] (Moscow)

Mechanization of construction and assembling works in the Soviet Union. Przegl budowl i bud mieszk 36 no.10:574-580 0 '64.

REEROV, N.I.; MOTASOV, Ye.N.; KOSTIN, M.I.

Branch mine conveyor lines as an object of remote control.
Nauch. trudy KNIUI no.15:63-83 '64. (MIRA 18:8)

KOSTIN, Mikhail Kondrat'yevich; ANDREYEV, N.A., otv.red.; ANDREYEV, M.A.,
red.; ZOLOTOV, P.T., red.; IGNAT'YEV, V.I., red.; VIL'CHENKO, R.D.,
red.; MIKHAYLOVA, A.M., tekhn.red.

[Russian-Chuvash dictionary of agricultural terms] Rusako-chm-
vashckii slovar' sel'skokhoziaistvennykh terminov. Cheboksary,
Chuvashgosizdat, 1959. 91 p. (MIRA 14:1)

(Agriculture--Dictionaries)

(Russian language--Dictionaries--Chuvash)

BERKMAN, Iosif L'vovich, inzh.; RANNEV, A.V., kand. tekhn. nauk;
REYSH), A.K., kand.tekhn.nauk; KOSTIN, M.N., nauchn.red.;
BEREZOVSKAYA, A.L., ved. red.; PERSON, M.N., tekhn.red.

[Single-bucket construction excavators] Odnokovshovye
stroitel'nye ekskavatory. Izd.3., perer. i dop. Moskva,
Proftekhizdat, 1964. 642 p. (MIRA 17:2)

KOSTIN, M. V. and APALEV, E. M.

"Chlorophos for stable fly control in reindeer breeding."

Veterinariya, Vol 38 No. 5 1961

Kostin, M. V. - Director of Karagin Reindeerbreeding Sovkhoz, Penzhina Raion,
Kamchatka Oblast'.

GALKIN, Rostislav Nikolayevich, inzh.; SHMERLING Iosif Yefimovich,
inzh.; KOSTIN, M.Ye., retsenzent; GRIGOR'YEV, S.N.,
retsenzent; ~~LOBOVUSHKIN~~, M.P., red.; LOBANOV, Ye.M.,
red.izd-va; RIDNAYA, I.V., tekhn. red.

[Automatic devices for beacons and buoys] Avtomaticheskie
ustroistva v sudokhodnoi obstanovke. Moskva, Izd-vo
"Rechnoi transport," 1963. 91 p. (MIRA 16:9)
(Aids to navigation) (Automatic control)

85-58-4-17/36

AUTHORS: Kostin, N., Captain, and Grachev, Yu., Senior Lieutenant

TITLE: For Young People—Life in the Military Air Forces (Molodezhi — o zhizni voyenno-vozdushnykh sil); Distant Airways (Na dal'nikh marshrutakh)

PERIODICAL: Kryl'ya rodiny, 1958, Nr 4, pp 16-20 (USSR)

ABSTRACT: The authors relate individual incidents in the life and operations of various air force units. The following personalities are shown in photographs appearing on the insert following page 16: Maj D. Ustyushin, Military Pilot 1st class, a bomber pilot; Capt A. Shlyapin, Navigator 1st class; Pvt F. Popkov, radio gunner; Pvt V. Goncharenko, aerial gunner; V. Gordilovskiy, Military Pilot 1st class; Sen Lt N. Faytsev, receiving his Party card from Lt Col I. Dombrovskiy; Sen Lt G. Kiznetsov, navigator; Sen Lt M. Bobokha, pilot; Sen Sgt I. Korobeynikov, radio gunner; Maj M. Rudenko, bomber pilot; Maj G. Dushanov, Navigator 1st class; Sen Lt L. Shlyapin; Sen Lt V. Mazeyev, Navigator; Sen Lt R. Bakirov, Navigator; Sen Tec V. Polukhin; Capt A. Kulibaba, recently designated navigator 1st class and Party member; Capt Vasilii Ivanovich Romanov, Military Pilot 1st class, with wife Yuliya Ivanovna and son Sasha. Other personalities mentioned include: Capt Pavel Fedorovich Vlasov, holder of 3 Slava Orders, who completed 204 combat missions during the War and participated in the bombing of Berlin; Urshuntsov, Card 1/2

85-58-4-17/36

For Young People—Life in the Military Air Forces

Hero of the Soviet Union; Maj Gatsuk, bomber pilot; Capt Stolyarov, recently designated Navigator 1st class, and Maj Sayenko, outstanding unit commander.

AVAILABLE: Library of Congress

1. Air Force USSR

Card 2/2

KOSTIN, N.; KUZIN, A., tekhnik-stroitel'.

Slag concrete foundations. Sel'.stroil. 11 no.12:29
D '56.

(MLRA 10:2)

1. Nachal'nik Yurlovskogo rayonnogo otдела po stroitel'stvu
v kolkhosakh Tambovskoy oblasti. (For Kostin) 2. Yurlovskiy
rayonnyy otдел po stroitel'stvu kolkhosakh Tambovskoy oblasti.
(for Kuzin).

(Slag concrete)

KOSTIN, N.; KARPUKHIN, S.

Valuable initiative. Den. i kred. 19 no.11:40-43 N '61.

(MIRA 14:12)

(Kursk Province--Collective farms--Accounting)

(Kursk Province--Banks and banking)

KOSTIN, N., polkovnik

Political organizations inform the Communists on their work.
Komm.Vooruzh.Sil 3 no.22:68-71 N '62. (MIRA 15:12)

1. Nachal'nik partiyno-organizatsionnogo otdela politicheskogo
upravleniya Yuzhnoy gruppy voysk.
(Russia--Army--Political activity)

SHTERN, V.P.; KOSTIN, N.A.

Static charge system of the series K electric locomotive. Elek. i
tepl.tiaga no.7:37-40 J1 '63. (MIRA 16:9)

1. Nachal'nik depo Kavkazskaya Severo-Kavkazskoy dorogi (for Shtern).
2. Starshiy inzh. depo Kavkazskaya Severo-Kavkazskoy dorogi (for Kostin).

(Electric locomotives--Batteries)

ZVYAGINTSEVA, Klavdiya Mikhaylovna; KOSTIN, N.A., retsenzent

[Coal industry as a raw material base of the chemical industry] Ugol'naia promyshlennost' kak syr'evaia baza khimicheskoi industrii. Moskva, Nedra, 1965. 48 p.
(MIRA 18:7)

KOSTIN, N.A.; SHTERN, V.P.

Advantages of the high-voltage regulation of a.c.locomotives.
Zhel.dor.transp. 45 no.10:69-70 0 '63. (MIRA 16:11)

1. Starshiy inzh.depo Kavkazskaya Severo-Kavkazskoy dorogi (for
Kostin). 2. Nachal'nik lokomotivnogo depo Kavkazskaya Severo-Kav-
kazskoy dorogi (for Shtern).

KOSTIN, N.A.

Movable supports used in British mines. Biul. tekhn.-ekon. inform.
no.8:89-91 '58. (MIRA 11:10)
(Great Britain--Mine timbering)

(11) - L 01964-67

ENT(d)/ENP(i)/ENT(l)

ACC NR: AM005024

Monograph

UR/

Radchenko, Viktor Danilovich; Radionov, Nikolay Il'ich; Kostin, Nikolay Aleksandrovich

Protection of semiconductor rectifiers of electric rolling stock / 1 (Zashchita poluprovodnikovyykh vypryamiteley elektropodvizhnogo sostava) Moscow, Izd-vo "Transport", 65. 0114 p. illus., biblio., fold. diagr. 2,500 copies printed.

TOPIC TAGS: railway equipment, railway rolling stock, locomotive engineering, electronic equipment, semiconductor rectifier, electronic rectifier, electronic test equipment, electronic signal, electronic switch

PURPOSE AND COVERAGE: This book describes the design and structure of instruments used for the protection of semiconductor rectifiers of electric rolling stock of type EP7^k, EP9, VL60^k and VL80^k and K. Operating and repair instructions are given based on their usage as they were tested in train depo of Gorkiy and North Caucasus Line. The book is intended for workers at train. depots, which deal with the operation and repair of electric rolling stock with semiconductor rectifiers.

TABLE OF CONTENTS (abridged):

From authors ---3

Ch. I. Basic network of electric rolling stock with semiconductor rectifiers --16

Ch. II. Protective devices of electric rolling stock rectifiers of type EP7^k and EP9 --- 35

Card 1/2

UDC: 621.335

L 01904-07

ACC NR: AM6005024

- Ch. III. Protection of semiconductor rectifiers of electric rolling stocks of
EP7^k and EP9 types with high speed contactors --56
- Ch. IV. Protective devices of semiconductor rectifiers of rolling stock type K -89
- Ch. V. Protective devices of semiconductor rectifiers of rolling stock type
VL60^k and VL80^k -- 113

SUB CODE: 13,09/SUBM DATE: 25Feb65/ ORIG REF: 009/

Card 2/2 fv

KOSTIN, N.A.

Improved ventilation in shield mining. Ugol' 33 no.12:16-19 D '58.
(MIRA 11:12)

(Mine ventilation)

KOSTIN, N. A.

Cand Tec Sci, Diss -- "Investigation and means of improving ventilation conditions as per the dust factor in mining stopes of steep seams".
Moscow, 1961. 14 pp, 22 cm (Min of Higher and Inter Spec Educ RSFSR.
Moscow Mining Inst imeni I. V. Stalin), 200 copies, Not for sale (KL,
No 9, 1961, p 182, No 24346). [61-52315]

RADCHENKO, Viktor Danilovich, kand. tekhn. nauk; RADIONOV,
Nikolay Il'ich, inzh.; KOSTIN, Nikolay Aleksandrovich,
inzh.; KUCHKO, E.A., red.

[Protection of semiconductor rectifiers of electric rolling stock] Zashchita poluprovodnikovyykh vypriamitelei elektropodvizhnogo sostava. Moskva, Transport, 1965. 114 p.
(MIRA 18:3)

VENER, R.A., red.; SPERANSKAYA, G.V., red.; AKOPOV, M.G., red.;
KOSTIN, N.A., red.; MIRONOVA, T.A., ved. red.

[Preparation and complete utilization of fuel] Oboga-
shchenie i kompleksnoe ispol'zovanie topliva. Moskva,
Nedra, 1965. 255 p. (MIRA 18:6)

1. Moscow. Institut goryuchikh iskopayemykh.

ACCESSION NR: APh017356

S/0126/64/017/002/0237/0242

AUTHORS: Talashkevich, I. P.; Kostin, N. F.; Aleksandrov, K. S.

TITLE: Elastic properties of fiber textured cubic metals

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 2, 1964, 237-242

TOPIC TAGS: modulus of elasticity, shear modulus, polycrystalline material, single crystal, elastic constant, Poisson coefficient, elastic, anisotropy

ABSTRACT: Expressions have been derived to determine the average value of Young's modulus E and the shear modulus G of isotropic polycrystalline material from the elastic constants of fiber-textured cubic metals. In a single axis grain (composed of a cubic system) the various grain elastic constants are determined by means of the elastic constants s_{ik} of single crystals. These lead to the expressions for

\bar{E} and \bar{G}

$$\bar{E} = \frac{E^r}{1 - \frac{2}{5}(\sigma_d - \sigma_l)},$$

$$\bar{G} = \frac{G^r}{1 + \frac{2}{5} \frac{\sigma_d - \sigma_l}{1 + \sigma_l}}.$$

Card 1/3

ACCESSION NR: AP4017356

where σ_d - dispersion Poisson coefficient and

$$\sigma_d = -\frac{s_{11}^*}{s_{33}^*}$$

These are verified experimentally for 10-mm copper specimens of type M1 and MS, annealed at 600C for three hours and drawn through a die at room temperature down to 0.4-1.0 mm diameter. A qualitative analysis is made of the texture of the copper specimens from the change in E and G moduli, based on the fact that in face-centered cubic metals two single axis textures are created upon drawing the specimen with $[111]$ and $[100]$ orientations. The relationship between the sign of the elastic anisotropy and texture coefficient C_4 is given by

$$s_{33}^* = s_{11}^* - \frac{1}{10} \frac{s}{\pi n_4} C_4, \quad s_{44}^* = s_{44}^* + \frac{1}{5} \frac{s}{\pi n_4} C_4$$

where $n_4 = -0.64636$. Orig. art. has: 8 formulas, 1 table, and 1 figure.

ASSOCIATION: Institut fiziki SO AN SSSR (Institute of Physics SO AN SSSR)

Card 2/3

ACCESSION NR: APL017356

SUBMITTED: 27Mar63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: ME

NO REF SOV: 008

OTHER: 015

Card 3/3

KOSTIN, N.F.; YUDINA, K.A.

X-ray diffraction analysis of alum inclusion compounds.
Zhur.neorg.khim. 10 no.11:2575-2576 N '65.

(MIRA 18:12)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR i
Krasnoyarskiy institut tsvetnykh metallov. Submitted
December 1, 1964.

KOSTIN, N.F.; LUBENETS, S.V.; ALEKSANDROV, K.S.

Selective etching of sodium chloride crystals. Kristallografiia
6 no.5:737-744 S-O '61. (MIRA 14:10)

1. Institut fiziki Sibirskogo otdeleniya AN SSSR.
(Salt) (Crystallography)

LUBENETS, S.V.; KOSTIN, N.F.

Selective etching of potassium halides. Kristallografiia 7
no.2:328-330 Mr-Apr '62. (MIRA 15:4)

1. Krasnoyarskiy institut fiziki Sibirskogo otdeleniya AN SSSR.
(Potassium halide crystals) (Etching)

KOSTIN, N. M. Cand Tech Sci -- (diss) "Study of the Hydrodynamics of the Process of the ~~XXXXXXXX~~ Mixing of Suspensions by Flotation Mixtures." Len, 1957. 16 pp with graphs, 20 cm.

(Min of Higher Education USSR, Len Order of Labor Red Banner ^{Technological} ~~Engineering~~ Inst im Lensovet, Chair of Processes and Apparata),
100 copies (KL, 27-57, 107)

- 35 -

and of the uniformity of distribution of a suspension of sand and of Fe ore of a wide range of particle sizes in fluids of different viscosities.

AUTHORS: Pavlushenko, I.S., Kostin, N.M. 32-24-4-60/67

TITLE: Construction of a Sample-Taking Device (Konstruktsiya probotbornika)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 4, pp. 501-502 (USSR)

ABSTRACT: The following device is recommended for taking samples of suspensions: Two rubber plates are fastened to a holding ring; they are re-enforced by two metal disks each which fit tightly into a cylinder in which they can be moved up and down, so that a sort of pumping effect is attained. The axis of the holding ring to which the plates are fastened, passes through a sealed tube at the upper end of the cylinder bottom, while the lower plate protrudes into the suspension so that in this way the space between the plates is filled with the suspension. After a short period (5-10 seconds) the space between the plates is closed by quickly moving down the cylinder and the device is taken out. The suspension located between the plates in the cylinder can then be taken out. Before using the sample-taking device calibration can be carried out by measuring the interspace with water or by

Card 1/2

Construction of a Sample-Taking Device

32-24-4-60/67

weighing the device when full or empty respectively. It was found in practice that the error limit of this method of taking samples does not exceed 3% (relative). Laboratory mechanic I.V. Povorov assisted in working out the construction. There is 1 figure.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet
(Leningrad Technological Institute imeni Lensovet)

1. Solutions--Sampling
2. Solutions--Testing equipment

Card 2/2

KOSTIN, N.M., kand.tekhn.nauk

Highly qualified engineering personnel for the woodpulp and paper industries. Bum. prom. 36 no.8:4-6 Ag '61. (MIRA 14:8)

1. Rektor Leningradskogo tekhnologicheskogo instituta
tsellyulozno-bumazhnoy promyshlennosti.
(Paper industry) (Woodpulp industry)

KOSTIN, N.M., kand.tekhn.nauk

New reinforcement of the engineer staff in the woodpulp and paper industry. Bum.prom. 37 no.9:29-30 S '62. (MIRA 15:9)

1. Rektor Leningradskogo tekhnologicheskogo instituta
tsellyulozno-bumazhnoy promyshlennosti.
(Technical education) (Woodpulp industry)

L 10789-66 FBD/EWT(1)/EWP(s)/EWT(m)/EEC(k)-2/EPF(n)-2/T/EWP(k)/EWA(m)-2/EWA(h)/

ACC NR: AP6001660 ETC(m) SCTE /LJP(c) SOURCE CODE: UR/0051/65/019/006/0982/0984

AUTHOR: Aleksandrov, Ye. B.; Bonch-Bruyevich, A. M.; Kostin, N. N.; Khodovoy, V. A.

ORG: none

TITLE: Stimulated Raman scattering in a selective resonator

SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 982-984

TOPIC TAGS: laser, Raman scattering, stimulated emission, laser cavity, Raman laser

ABSTRACT: The stimulated Raman scattering was investigated at an excitation power just above the threshold using the following three different setups: 1) a Raman cell in the resonator of a laser; 2) a longitudinal selective resonator (the term used by the authors for the case when the Raman laser resonator is in the direction of the ruby laser resonator); and 3) a transverse selective resonator (the term used for the case when the Raman laser resonator is rotated 90° from the direction of the axis of the ruby laser, i.e., a 90° off-axis Raman laser resonator). In the first setup the giant pulses were produced by a ruby crystal. Using two variable-transmission-coefficient filters (transmission coefficient 30—50% at $\lambda = 694 \text{ m}\mu$) the effective intensity of the 30—300 nsec-duration pulses in the resonator reached 100 Mwt/cm². The maximum energy per pulse was 3—4 j. Two dielectric mirrors with a transmission coefficient of 0.4% at $\lambda = 694 \text{ m}\mu$, 0.8% at $\lambda 745 \text{ m}\mu$ (the fundamental

Card 1/2

UDC: 535.375+621.375.9:535

L 10789-66

ACC NR: AP6001660

SRS line in benzene), 40% at $\lambda = 805 \text{ m}\mu$ (first harmonic) and 70% at $\lambda = 875 \text{ m}$ (second harmonic) were used in the experiments. The SRS in benzene had thresholds for a specified length of the Raman cell (l) and the laser input power. No SRS was observed at $l < 2$; however, SRS was stable for $5 < l < 60 \text{ cm}$. The threshold power decreased almost linearly with increasing l. At $l = 60 \text{ cm}$ the efficiency of energy conversion reached 10% of the power in the cavity. It was observed that an increase in the energy of the pulses from the ruby 1.5—2 times above the threshold resulted in a three-order increase in SRS. In the longitudinal selective setup the additional reflector between the ruby rod and the Raman cell had a transmission coefficient of 90% at $\lambda = 694 \text{ m}\mu$, 10% at $\lambda = 745 \text{ }\mu$, and 1% at $\lambda = 805$ and $875 \text{ m}\mu$. In this mode of operation the efficiency of energy conversion was at least as high as that in the previous case. Two higher harmonics at $\lambda = 745$ and $805 \text{ m}\mu$ which reached saturation at ~10% of the input power were observed. Results similar to those of the longitudinal setup were achieved with a transverse selective setup. However, SRS was achieved in a Raman cell the length of which along the laser beam was only 1 cm. Stimulated Brillouin scattering in benzene was also observed in this setup. Orig. art. has: 1 figure.

[CS]

SUB CODE: 20

SUBM DATE: 15Apr65/ OTH REF: 004/ ATD PRESS: 4168

Card 2/2

ACC NR: AP7007681

SOURCE CODE: UR/0386/66/003/002/0085/0088

AUTHOR: Aleksandrov, Ye. B.; Bonch-Bryevich, A. M.; Kostin, N. N.; Khodovoy, V. A.

ORG: State "Order of Lenin" Institute of Optics im. S. I. Vavilov (Gosudarstvennyy ordena Lenina Opticheskiy institut)

TITLE: Frequency shift of optical transition in the field of a light wave

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu, v. 3, no. 2, 1966, 85-88

TOPIC TAGS: optic transition, ruby laser, photomultiplier, optic filter, resonance line, laser pulsation, magnetic field intensity, light absorption/FS-7 filter, KS-19 bleaching filter

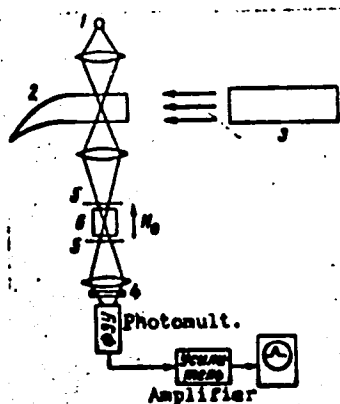
ABSTRACT: The authors experimentally investigated the frequency shift of the optical resonant transition $4S_{1/2} - 4P_{1/2,3/2}$ of potassium (principal doublet). It can be shown that the expected frequency shift of this transition is connected principally with virtual transition induced by the laser pulse from the ground level ($4S_{1/2} - 4P_{1/2,3/2}$) and the excited level ($4P_{3/2} - 6S_{1/2}$). The first pair of transitions is still sufficiently far from the resonances (the transition wavelengths are 7665 and 7699 Å, that of the laser is 6943 Å). The $4P_{3/2} - 6S_{1/2}$ transition is much closer to resonance ($\lambda = 6939$ Å). In spite of this, all these transitions make comparable contributions to the sought frequency shift of the investigated transition, owing to the difference in the oscillator strengths. It is important that the ground and

Card 1/4

UDC: none

ACC NR: AP7007681

excited levels are shifted here by the ruby-laser light in opposite directions. In the experiment light from potassium lamp 1 was passed through vessel 2 with potassium vapor saturated at 100°C (see the figure). At the selected temperature, the vapor absorbed about 80% of the lamp's resonant radiation. Transmission of light by vessel 2 was expected to increase during the action of the pulse from laser 3, provided the resultant transition frequency shift is commensurate with the line width of the lamp radiation (it was assumed that this line was broader than the absorption line of the vapor). The transmission of the resonant light was recorded with a photomultiplier whose output was fed to a pulsed oscilloscope (4 - glass filters).



Card 2/4

ACC NR: AP7007681

The scattered laser light in the registration channel was reliably cut out with FS-7 filters. Preliminary experiments have shown, however, that the laser pulse is accompanied by scattered radiation with spectral components lying in the region of the registered potassium line. The authors used a special method of filtering the resonant line with the aid of the Faraday effect to combat the mechanism of radiation occurrence. After passing through vessel 2, the light beam of the potassium lamp was made to pass through an auxiliary cuvette 6 filled with potassium vapor and placed between crossed polaroids 5. A local magnetic field of approximately 2 kOe was applied to cuvette 6. The magnetic field produced, besides splitting of the absorption line, strong radiation of the plane of polarization of the light, but only in the nearest vicinity of optical resonance. By magnetic field intensity selection, the system was made to transmit almost all the resonant line, and to absorb the extraneous light. The entire apparatus behaves like a high-transmission optical filter with a bandwidth on the order of 0.1 cm^{-1} . Under the conditions described, a distinct signal was recorded, evidencing a decrease in the absorption of the resonant light by the potassium atoms in vessel 2 during the time of action of the laser pulse (20 nsec); the laser operated in the monopulse mode by using bleaching filters KS-19. To verify that the change in the light absorption was not connected with some experimental errors the authors checked: (1) that the signal vanished when the potassium light was turned off; (2) that the signal vanished when the potassium vapor was frozen out in vessel 2 (with the illumination on the photomultiplier maintained at the previous level); and (3) that the signal vanished when the operating mode of lamp 1 was forced so as to broaden the emission line (the broadening was confirmed by the observations). The minimum laser radiation power density at which

Card 3/4

ACC NR: AP7007681

the bleaching signal was produced was $\sim 10 \text{ MW/cm}^2$, corresponding to an electric field intensity (in the light) of 10^5 V/cm . The half-width of the spectral emission line is estimated at $\sim 3 \times 10^9 \text{ cps}$, so that the observed shift was of the same order. The authors thank D. A. Godina for providing the high grade polaroids. Orig. art. has: 1 formula and 1 figure.

SUB CODE: 20 / SUBM DATE: 30Nov65 / ORIG REF: 001 /
OTH REF: 003

Card 4/4

L 10242-66 FED/EWT(1)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(k)/EWA(m)-2/EWA(h) SCTB/LIP(c)

ACC NR: AP6000197

WG/WH

SOURCE CODE: UR/0056/65/049/005/1435/1444

55 44

55 44

55 44

55 44

AUTHOR: Aleksandrov, Ye. B.; Bonch-Bruyevich, A. M.; Kostin, N. N.; Khodovoy, V. A.

ORG: none

77

TITLE: Investigation of stimulated Raman and Brillouin scattering in selective resonators

B

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 5, 1965, 1435-1444

TOPIC TAGS: laser, second harmonic nonlinear optics, Raman scattering, Brillouin scattering, resonator

ABSTRACT: The stimulated Raman scattering was investigated at an excitation power just above the threshold using the following three different setups: 1) a Raman cell in the resonator of a laser; 2) a longitudinal selective resonator [the term used by the authors for the case when the Raman laser resonator is in the direction of the ruby laser resonator]; and 3) a transverse selective resonator [the term used for the case when the Raman laser resonator is rotated 90° from the direction of the axis of the ruby laser, i.e., a 90° off-axis Raman laser resonator] (see Fig. 1). In the first setup (Fig. 1a) the giant pulses were produced by a ruby crystal 10 to 12 cm long and 12-16 mm in diameter. With two variable-transmission-coefficient filters (transmission coefficient 10-80% at $\lambda = 6943 \text{ \AA}$) the effective intensity of

Card 1/4

2

L 10242-66

ACC NR: AP6000197

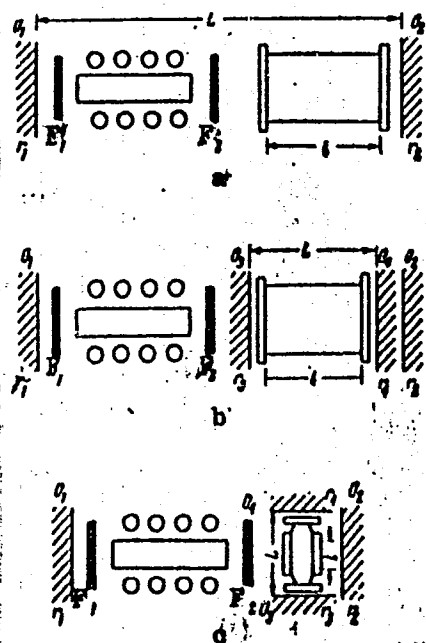


Fig. 1. The experimental setup

a - SRS in the ruby laser resonator;
b - SRS in the longitudinal selective resonator; c - SRS in the transverse selective resonator.

L - resonator length for scattered radiation; l - length of the "active" path for the scattered radiation in the resonator; 0 - mirrors; r - coefficient of reflection; F - variable coefficient of absorption filters.

Card 2/4

L 10242-66

ACC NR: AP6000197

the 20—200 nsec-duration pulses in the resonator reached 100 Mwt/cm². The maximum energy per pulse was 5—6 j. Two dielectric mirrors O₁ and O₂ with a transmission coefficient of 0.4% at $\lambda = 694$ m μ , 0.8% at $\lambda = 745$ m μ (the fundamental SRS line in benzene), and 40% at $\lambda = 805$ m μ (the first harmonic) were used in the experiments. The sensitivity of the detectors was sufficient to register 10⁻⁴ of the energy of the laser pulse. The setup shown in Fig. 1a was used to investigate SRS in benzene. It was observed that an increase in the energy of the pulses from the ruby laser 1.5—2 times above the threshold resulted in a three-order increase in SRS at the fundamental frequency. Saturation was reached when the intensity of SRS was about 10% of the energy input, at which time the second harmonic whose energy output quickly reached the level of SRS at the fundamental frequency (at saturation), appeared. When the second harmonic reached saturation the duration and the intensity of the laser pulses decreased sharply due to the reverse effect of SRS on the ruby laser pulses. When the length of the Raman cell (l) was increased, the threshold power and the pulse energy required to achieve SRS decreased. Also, the larger the cell, the smaller the energy above the threshold at which second harmonics were generated. The SRS was stable when l was between 5 and 60 cm. In the longitudinal selective setup (Fig. 1b) reflector O₂ replaced O₄ and the transmission coefficient of O₃ was very high at $\lambda = 694$ m μ and was at a minimum at $\lambda = 745$ m μ . The gain of SRS at l = 5, 20, and 60 cm was at least as high as in the previous case, although the pump power and the pulse energy required were considerably smaller. For example, when the output of a ruby laser pulse of 30 nsec duration was 40 Mw (l = 20 cm) three 10 Mw SRS pulses of 20 nsec duration were observed in the Raman laser cell. Similar re-

Card 3/4

L 10242-66

ACC NR: AP6000197

sults were obtained using the selective transverse setup shown in Fig. 1c. The authors also observed stimulated Brillouin scattering in benzene, carbon disulfide, and nitrobenzene (the angle of the exciting beam was 90°). Use of the 90° off-axis Raman laser made it possible to obtain stimulated Brillouin scattering at lower pump power. Orig. art. has: 5 figures and 1 table. [CS]

SUB CODE: 20/ SUBM DATE: 15Jun65/ ORIG REF: 003/ OTH REF: 015/ ATD PRESS:

4161

Card

L 27748-66 EWT(1) IJP(c) GG/WW
ACC NRI AFG018698

SOURCE CODE: UR/0386/66/003/011/0425/0429

AUTHOR: Bonch-Bruyevich, A. M.; Kostin, N. N.; Khodovoy, V. A.

ORG: none

TITLE: Resonant birefringence in the electric field of a light wave

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 11, 1966, 425-429

TOPIC TAGS: potassium, double refraction, laser application, resonance absorption, light absorption

ABSTRACT: The authors observed the occurrence of birefringence in potassium vapor under the influence of the electric field of ruby laser emission by passing simultaneously light from a potassium lamp and from a ruby laser through a vessel containing saturated potassium vapor at 150C. At this temperature, the vapor absorbed approximately 50% of the resonant light from the lamp. When the laser pulse was applied (20 nsec duration), a clear-cut signal was observed, indicating an increase in the resonant radiation from the lamp passing through the vessel. At a laser emission power density of the order of 5 Mw/cm² the amplitude of the signal corresponded to transmission of several times ten per cent of the intensity of the light from the lamp. The greatest signal was observed when the lamp radiation and laser emission electric fields were at a 45° angle. There was no signal when this angle was 0 or 90°. There was likewise no signal when the potassium vapor in the vessel

Card 1/2

L 27748-66

ACC NR: AP6018698

4
was frozen out, when the potassium lamp was turned off, or when the filters used to polarize the light were removed. The latter, together with the dependence of the signal on the angle between the electric vectors, proves that the observed effect is due to birefringence induced by the laser pulse because the shift of the absorption line in the laser-emission electric field has different values when the electric vector of the light is parallel and perpendicular to the vector of the laser. The value of this line shift is calculated and the wavelength dependence of the laser emission intensity required to obtain a signal of prescribed magnitude is measured and found to be linear in the wavelength difference between the resonant transition and the laser emission. This agrees with the theoretical calculations. The authors thank V. M. Zakharova and N. A. Vorob'yeva of LGU for the opportunity to measure the line contour with their apparatus, and Ye. B. Aleksandrov for help and a discussion. Orig. art. has: 3 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 28Mar66/ ORIG REF: 003/ OTH REF: 001

Card 2/2 *Sp*

KOSTIN, N.P.

CA

27

Rapid determination of fat in leather. N. P. Kostin, B. N. Rybakov and P. K. Isiev. *Kosherenskiy Zhurnal Prom. S. S. S. R.* 12, No. 4, 50(1951); *Chem. Zentr.* 1950, II, 2901. — The method proposed by Wislizenus in 1920 (cf. *C. A.* 15, 380) for the analysis of coal, wool, etc., is recommended for the detn. of fat in leather. The sample is placed in a flask equipped with a reflux condenser through which a thread is passed only at the beginning of the boiling of the ether. The thread is removed after the end of the boiling and is rinsed with the condensate passing through the condenser. The "boiling" time is limited to 10 min. and the "rinsing" time to 15 min. The results agree satisfactorily with those of the Soxhlet method. A. A. Bochtchuk

ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION

KOSTIN, N. P.

Technology

(General technology of leather; part 1).
(Moskva), Gizleprom, 1951.

9. Monthly List of Russian Accessions, Library of Congress, November ² 195~~5~~, Uncl.

KOSTIN, N. P.

USSR/Mines
Mining Methods
Bauxite

Jul 48

"Rapid Cutting of Drifts at the North Ural Bauxite Mines," B. I. Nifontov, N. P. Kostin, N. A. Alekseyevskiy, Engineers, 5 pp

"Gor Zhur" No 7

Refers to success in decreasing time required for rapid cutting of drifts. Rapid cutting of 39 drifts was carried out in 1943-1947 at subject location. Describes cutting at various times, disclosing technical operations, speed, etc. Gives three tables with data on cutting operations.

PA 33/49T82

KOSTIN, N

P

N/5
729.61
.K8

Obshchaya tekhnologiya kozhi (General technology of hides)
Izd. 3, isp. i dop. Moskva, Gisleprom, 1951 -
v. diagrs., tables.
Lib. has: v. 1 (AB 520559)

KOSTIN, N.P., gornyy inzhener; GUSAROV, M.I., gornyy inzhener; ALEXSEYEVSKIY,
N.A., gornyy inzhener; STADNICHENKO, A.P., gornyy inzhener.

Drift mining at a speed of 302 meters per month. Gor.shur.no.9:12-15
S '56. (MIRA 9:10)

1.Severoural'skiye boksitovyie rudniki.
(Ural Mountain region--Bauxite) (Mining engineering)

KOSTIN, N.P.; MIKHAYLOV, A.N., retsenzent; VOLKOV, V.A., retsenzent;
YANTOVSKAYA, P.A., red.; SMOL'YAKOVA, M.V., tekhn. red.

[General technology of leather] Obshchaya tekhnologiya koshi.
Izd.3., ispr. i dop. Moskva, Gisleprom. Pt.1. 1951. 334 p.
(MIRA 16:8)

(Leather)

KOSTIN, N.P., agronom

Manure-soil composts and crop yields. Zemledelie 24 no.11:
72-76 N '62. (MIRA 16:1)

1. Oporno-pokazatel'noye khozyaystvo "Belogbrka", Leningradskoy
obl.

(Compost)

KOSTIN, N. S.

Diseases of the Circulatory System

Dissertation: "Recognition and Treatment of Arteriosclerosis Obliterans and Thromboangiitis."
Cand Med Sci, Central Inst for the Advanced Training of Physicians, 16 Mar 54. (Vechernaya Moskva, 4 Mar 54).

SO: SUM 213, 20 Sep 54

KOSTIN, N.S.

"On a Modified Method for Packing 'TsIPK' Ampoules With Blood,"
by N. S. Kostin, Lt Col of Medical Service, Candidate of Medi-
cal Sciences, Voyenno-Meditsinskiy Zhurnal, No 10, Oct 56, p 74

The author describes a method used at the blood transfusion base of
his hospital for packing ampoules with blood, using plastic clamps and
specially designed pliers. The technique of packing is simplified, and
considerable time is saved. (U)

SUM-1345

KOSTIN, N.S., kandidat meditsinskikh nauk (Voroshilov-Ussuriyskiy)

Late results from repairing defects of the tibia. Ortop.travn. i
protos. 17 no.6:88 M-D '56. (MIRA 10:2)
(TIBA—SURGERY)

KOSTIN, N. S., kandidat meditsinskikh nauk.

Significance of general examinations in the early diagnosis
of endarteritis obliterans. Sov. med. 20 no.4:48-50 Ap '56.
(MLRA 9:8)

(ENDARTERITIS OBLITERANS, diagnosis,
complex technic (Rus))

KOSTIN, N.S. (Voroshilov-Uss)

Treating hypotensive syndromes in brain concussions. Vop.neirokhir.
21 no.1:51-52 Ja-F '57. (MLRA 10:3)
(BRAIN--CONCUSSIONS) (HYPOTENSION)

KOSTIN, N.S., kandidat meditsinskikh nauk

Significance of the hydrophilia test in the diagnosis of endarteritis
obliterans. Sov.med. 21 no.1:106-110 Ja '57. (MLRA 10:6)

(ARTERIOSCLEROSIS, OBLITERANS, compl.

water metab. disord., diag., hydrophilia skin test)

(WATER, metab.

disord., in arteriosclerosis obliterans, diag.,

hydrophilia skin test)

KOSTIN, N.S., kand.med.nauk, KRAVCHENKO, N.S., starshaya med. sestra
~~Med. sestra~~ (Primorskiy kray)

Kit for determining human blood groups. Med.sestra 17 no.5:27-28
My'58 (MIRA 11:6)

(MEDICAL INSTRUMENTS AND APPARATUS)
(BLOOD GROUPS)

GINZBURG, N.B., podpolkovnik meditsinskoy sluzhby; KOSTIN, N.S., —
podpolkovnik meditsinskoy sluzhby, kand.meditsinskikh nauk

Diagnosis of hemorrhage into the pericardium in a closed injury
of the thorax. Voen.-med. zhur. no. 6:50-62 Je '60.

(CHEST—WOUNDS AND INJURIES) (HEMORRHAGE) (MIRA 13:7)

KOSTIN, N.S., kand.med.nauk

Successful therapy for a patient with postoperative thromboembolism.
Khirurgiya 36 no.9:123-124 S '60. (MIRA 13:11)
(EMBOLISM)

KOSTIN, N. S., (Lieutenant Colonel of the Medical Service and Candidate of Medical Sciences)

"Segmental Pulmonary Resection for a Gunshot Wound"

Voyenno-Meditsinskiv Zhurnal, No. 12, December 1961, pp 62-73

KOSTIN, N.S., kand.med.nauk

Compound treatment of endarteritis obliterans. Nov. khir. arkh.
no.9:41-45 S '61. (MIRA 14:10)

(ARTERIES—DISEASES)

KOSTIN, N. S., podpolkovnik meditsinskoy sluzhby, kand. med. nauk

Segmental resection of the lung in gunshot wounds. Voen.-med.
zhur. no.12:68 D '61. (MIRA 15:7)

(LUNGS—SURGERY) (GUNSHOT WOUNDS)

KOSTIN, N.S., kand. med. nauk

Evaluation of arteriographic data in open fractures of the
bones of the extremities. Vestn. rent. i rad. 38 no.3:35-39
My--Je '63. (MIRA 17:7)

L 27273-66 EPF(n)-2/EWT(m) WW/JD/JG

ACC NR: AP6016873

SOURCE CODE: UR/0189/65/000/003/0045/0046

AUTHOR: Kostin, N. V.; Vargina, R. V.

ORG: Department of Analytical Chemistry, Moscow State University (Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo universiteta)

TITLE: Method of quantitative determination of thorium and scandium when present together

SOURCE: Moscow. Universitet. Vestnik. Seriya II. Khimiya, no. 3, 1965, 45-46

TOPIC TAGS: thorium, scandium, chemical precipitation, aromatic carboxylic acid, fluorinated organic compound

ABSTRACT: The authors investigated fluoro-derivatives of benzoic acid and found that m-fluorobenzoic acid precipitates thorium and scandium quantitatively from neutral and weakly acidic solutions of a salt mixture without reprecipitation and does not interfere with subsequent complexometric determination in the scandium filtrate. The reagents used included: 1) $\text{Th}(\text{SO}_4)_2 \cdot 8\text{H}_2\text{O}$, aqueous, $1.2 \cdot 10^{-2}\text{M}$ solution; 2) $\text{Sc}_2(\text{SO}_4)_3 \cdot 2\text{H}_2\text{O}$, $3.3 \cdot 10^{-3}\text{M}$ solution weakly acidic; 3) $\text{M} + \text{FC}_6\text{H}_4\text{COOH}$, 0.02 M aqueous solution; 4) Trilon B, 0.25 M aqueous solution. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 14Dec64 / OTH REF: 005

Card 1/1 CC

KOSTIN, N.V.; VARGINA, R.V.

Complexometric determination of scandium in the presence of
magnesium. Vest. Mosk. un. Ser. 2:Khim. 20 no.4:78-79
Jl-Ag '65. (MIRA 18:10)

1. Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo
universiteta.

KOSTIN, N.V.; VARGINA, R.V.

Quantitative determination of thorium and scandium when present together. Vest.Mosk.un.Ser 2:Khim. 20 no.3:45-46 My-Je '65.

(MIRA 18:8)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

KOSTIN, N.V.

Photometric method for determining small amounts of zinc in babbitts.
Vest.Mosk.un.Ser. 2: Khim. 15 no.1:49-53 '60. (MIRA 13:7)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.
(Babbitt metal) (Zinc--Analysis)

KOSTIN, N.V.; PASHINKIN, A.S.

Colorimetric determination of small amounts of zinc in babbitts.
Report No.2. Vest. Mosk. un. Ser. 2: Khim. 16 no.1:64-66 Ja-F '61.
(MIRA 1/4:4)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.
(Zinc—Analysis) (Babbitt metal)

SKOROBOGATOVA, N.V.; KOSTIN, N.Ye.; SIDORENKO, G.A.; STOLYAROVA, T.I.

Thalenite from albites of Eastern Siberia. Dokl. AN SSSR 155
no.1:100-103 Mr '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya. Predstavleno akademikom D.I.Shcherbakovym.

AKUTIN, N.Ye.; VOLZHENKOVA, A.Ya.

Effect of enclosing rocks on the composition of rare-earth mineralization. Geol. rud. mestorozh. 7 no.1:95-98 Jan '65. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya, Moskva.

KOSTIN, O.S., assistant

Bile cholesterol content and changes in bile pH in children with
angiocholecystitis. Ped., akush. i gin. 20 no.3:16-19 '58.

(MIRA 13:1)

1. Kafedra gospiatal'noy pediatrii (sav. - chlen-korrespondent AMN
SSSR, prof. O.M. Khokhol) Kiyevskogo ordena Trudovogo Krasnogo Znameni
meditsinskogo instituta im. akad. A.A. Bogomol'tsa (direktor - dots.
I.P. Alekseyenko).

(CHOLESTEROL)

(BILE)

(GALL-BLADDER--DISEASES)

KOSTIN, O.S., assistant

Catamnestic data on children with diseases of the biliary tract. Ped., akush. i gin. 22 no.5:23-25 '60. (MIRA 15:6)

1. Kafedra gosital'noy pediatrii (zav. - chlen-korrespondent AMN SSSR prof. O.M. Khokhol) Kiyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo instituta im. akad. Bogomol'tsa (direktor - dotsent I.P. Alekseyenko [Aleksieienko, I.P.]).
(BILIARY TRACT—DISEASES)

ACCESSION NR: AP4030390

S/0021/64/000/004/0461/0464

AUTHOR: Kostin, O. V. (Kostin, A. V.)

TITLE: On asymptotic series in the theory of nonlinear systems of ordinary differential equations

SOURCE: AN UkrSSR. Dopovidi, no. 4, 1964, 461-464

ABSTRACT: The nonlinear system

$$\frac{dy_i}{dt} = q_i(t) + \sum_{k=1}^n p_{ik}(t) y_k + \sum_{k_1+\dots+k_n=n} p_{ik_1\dots k_n}(t) y_1^{k_1} \dots y_n^{k_n}, \quad t > T, \\ (i = 1, \dots, n)$$

is considered. The coefficients of this system can, in a certain sense, be expanded into an asymptotic series of the type

$$\sum_{a=(k_0, \dots, k_{n-1})} F_a(t) y_1^{k_0} y_2^{k_1} \dots y_n^{k_{n-1}}, \\ a = (k_0, \dots, k_{n-1})$$

Card 1/2

ACCESSION NR: AP4030390

It is shown that under certain conditions a formal special solution of this system can be found. The components of such a solution are also of the form of the last mentioned series. The connection between the true and the obtained formal solution is discussed. Orig. art. has: 2 formulas.

ASSOCIATION: Odes'ky'y derzhavny'y universy'tet (Odessa State University)

SUBMITTED: 09Apr63

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: MA

NO REF SOV: 004

OTHER: 002

Card 2/2

S/021/62/000/010/003/008
D251/D308

AUTHOR: Kostin, O.V.

TITLE: Asymptotic formulas for the solutions of linear systems of ordinary differential equations

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 10, 1962, 1295 - 1296

TEXT: The author studies linear systems of the form

$$\frac{dy_i}{dt} = \sum_{k=1}^n p_{ik}(t)y_k \quad (i = 1, \dots, n). \quad (1)$$

It is assumed that t is real, $t \geq T = \text{const}$; $p_{ik}(t)$ are bounded, in the general case complex functions, with continuous derivatives $p_{ik}^{(\alpha)}(t)$, ($i, k = 1, \dots, n, \alpha = 1, \dots, m$); and the equation $\det/p_{ik}(t) =$

Card 1/2

Asymptotic formulas for the ...

S/021/62/000/010/003/008
D251/D308

$-\lambda \delta_1^k = O(\lambda)$, where δ_1^k is Kronecker's symbol, has at least one root $\lambda_1(t)$ such that $|\lambda_1(t) - \lambda_k(t)| \geq \alpha > 0$, $\alpha = \text{const}$ for all $t \geq T$, $k = 2, \dots, n$, where $\lambda_k(t)$ is another root of the equation.

By means of a method analogous to that of S.F. Feshchenko and L.D. Nikolenko (UMZh, v. 13, no. 3, 109, 1961) and using a special matrix transformation, it is possible to find asymptotic formulas for the fundamental solutions of (1) which correspond to the roots of the type $\lambda_1(t)$. ✓B

ASSOCIATION: Odes'kyy derzhavnyy universytet (Odessa State University)

PRESENTED: by Y.Z. Shtokalo, Academician

SUBMITTED: April 6, 1962

Card 2/2

KOSTIN, P.

Contribution of Kazakhstan to foreign trade. Vnesh.орг.
41 no.6:36-37 '61. (MIRA 14:7)

1. Upolnomochenny Ministerstva vneshney trgovli SSSR pri
Sovete Ministrov Kazakhskoy SSR.
(Kazakhstan--Commerce)

EAGAN, S.Z.; TRUKHANOV, V.G.; KOSTIN, P.A.; KUDRYAVTSEV, Ye.N.

Use of industrial rotary disk extractors for the two-stage
extraction of caprolactame. Khim. prom. no.2:94-101 F '64.
(MIRA 17:9)

KOSTIL, P. S.

Karst of the northern slope of the Skalistyy Range in the
Iaba-Zelenchuka interfluvium (Northern Caucasus). Izv. vys.
ucheb. zav.; geol. i razv. 8 no.9:42-46 S '65.

(MIRA 18:9)

1. Stavropol'skiy pedagogicheskiy institut.

RAGAN, S.Z.; TRUKHANOV, V.G.; KOSTIN, P.A.; KUDRYAVTSEV, Ye.N.

Extraction of caprolactam from sulfate liquors in rotary disk extractors.
Khim. prom. 41 no.3:184-186 Mr '65. (MIRA 18:7)

USSR/Chemistry - Reagents

Card 1/1 : Pub. 22 - 22/44

Authors : Levina, R. Ya., and Kostin, R. R.

Title : Reaction of cyclopropane hydrocarbons with mercuric salts

Periodical : Dok. AN SSSR 97/6, 1027-1030, Aug 21, 1954

Abstract : The derivation of mercuri-organic compounds from 1,1,2-trimethylcyclopropane during the reaction of the latter with mercuric acetate, is described. The splitting of the three-membered cycle, which takes place between the alkylated and non-alkylated carbon atoms, is explained. The mercuri-organic compounds, described for the first time in this report, were found to be gamma-mercured alcohols and their ethers of crystalline structure and high-melting point. Nine references: 6-USSR; 2-USA and 1-German (1911-1953). Table.

Institution : The M. V. Lomonosov State University, Moscow

Presented by: Academician A. N. Nesmeyanov, April 14, 1954.

1. KOSTIN, S.
2. USSR (600)
4. Agricultural Machinery
7. Tasks in mechanizing heavy work on state farms. *Mias.ind.SSSR* 23_no. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

~~KOSTIN S.~~ inshener.

New agricultural machinery. Mas. ind. SSSR 28 no.3:45-48 '57.
(Agricultural machinery) (MLBA 10:6)

KOSTIN, S.A., inzh.; KIRICHENKO, A.V., inzh.

Design of a continuous-action filter press for dewatering coagulated middlings and flotation products. Nauch. trudy KuzNIIUgleobog. no.1:46-52 '62.

(MIRA 16:8)

(Filter presses)

KOSTIN, S.A., inzh.; KAZAKOV, A.T., inzh.; KIRICHENKO, D.I., inzh.

Using polyacrylamide in laboratory and industrial studies on settling sludge and clarifying backwater at the Kirov preparation plant. Nauch. trudy KuzNIIUgleobog. no.1:62-72 '62. (MIRA 16:8)
(Kuznetsk Basin--Coal preparation) (Acrylamide)

KOSTIN, S.A., inzh.; KIRICHENKO, A.V., inzh.; KAZAKOV, A.T., inzh.

Laboratory studies of using compressed air in dewatering coal
middlings which have already been coagulated. Nauch. trudy
KuzNIIUgleobog. no.1:33-45 '62. (MIRA 16:8)
(Filters and filtration)

KOSTIN, S.A., inzh. [deceased]

Method of studying the filtrability of coal slurry and determining the optimal parameters of vacuum filter operating conditions. Nauch.trudy KuzNIUgleobog. no.2:35-55 '64. (MIRA 17:10)

KOSTIN, S.A., inzh.

Mechanism of dewatering sludge in a screw-type settling centrifuge
(for discussion). Nauch. trudy KuzNIIUgleobog. no.1:52-62 '62.
(MIRA 16:8)
(Centrifuges—Testing)

KOSTIN, S. I.

"procedure for Studying the Influence of Forest-Protected Zones on Micro-climate,"
Scientific Notes of Voronezh Forest-Economy Institute, Vol IX, 1946 (18-23).
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

KOSTIN, SERGEY IOSIFOVICH

N/5
623.4
.K8

Osnovy Meteorologii i Klimatologii (Foundations of Meteorology and Climatology)

Moskva, Gidrometeoizdat, 1949- V. Illus., Maps, Tables, Diags. Includes

Bibliographies. Lib. Has: 1951 1955

KOSTIN, S. I.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 216 - I

BOOK

Call No.: QC861.K64

Author: KOSTIN, S. I., Doctor of Geographical Sciences

Full Title: PRINCIPLES OF METEOROLOGY AND CLIMATOLOGY (2nd Edition)

Transliterated Title: Osnovy meteorologii i klimatologii (2-ye isdaniye)

Publishing Data

Originating Agency: None

Publishing House: Hydrometeorological Publishing House

Date: 1951

No. pp.: 372

No. of copies: 8,000

Editorial Staff

Editor: None

Tech. Ed.: None

Editor-in-Chief: None

Appraiser: None

Text Data

Coverage: The book is divided in two parts: the first on the fundamentals of meteorology, and the second on the fundamentals of climatology. It covers the usual description of the composition of the atmosphere, pressure, solar radiation, soil and air temperatures, water vapor, evaporation, condensation, precipitation and weather. In the climatological part, the climate, the distribution of climatic elements, climatic zones, and the climates of USSR are defined.

A textbook primarily adapted to agriculture and the needs of soil

1/2

000327

Osnovy meteorologii i klimatologii (2-ye izdaniye)

AID 216 - I

conservation and forestation as measures to improve climatic conditions. A practical plan followed in the tayga in the Amur basin, which resulted in raising the soil temperature and the water supply, is given as an example. This is compared to the deforestation and erosion of the American prairies. The book is of a certain interest in its description of the endeavors to change the nature of the soil, the results already attained, and in general the climates of the USSR, especially of the arctic regions.

Purpose: A textbook for students of agricultural colleges.

Facilities: None

No. of Russian and Slavic References: 33 (1931-1950)

Available: Library of Congress.

2/2

KOSTIN, S. I.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 485 - I

BOOK

Call No.: AF642509

Authors: KOSTIN, S. I. and POKROVSKAYA, T. V.

Full Title: CLIMATOLOGY

Transliterated Title: Klimatologiya

PUBLISHING DATA

Originating Agency: None

Publishing House: Hydrometeorological Publishing House (Gidrometeoizdat)

Date: 1953 No. pp.: 427 No. of copies: 11,000

Editorial Staff

Editor: Drozdov, O. A., Dr. Geogr. Sci.

TEXT DATA

Coverage: This work deals with the systematic aspects of climatology, the processes of climate formation, the microclimatic conditions of natural landscapes, and with regional features as revealed in the world pattern of climates. It gives a brief description of climates in different parts of the world and a more detailed account of climates in the USSR (p. 194-254). Special attention is given to problems of climatic changes and to methods of climatological evaluation of observations. The authors consider this work to be not only as a textbook but as useful also for scientific workers. The text is illustrated by examples from the USSR.

1/7

.Klimatologiya

AID 485 - I

Part I (except paragraph 12 and 13) is written by Prof. S. I. Kostin, Dr. of Geogr. Sci.; Part II - by T. V. Pokrovskaya, Kand. of Geogr. Sci., Senior scientific worker at the Main Geophysical Observatory. Part II deals with methods of climatological evaluation used in the USSR. Therefore this "Coverage" gives a full translation (with subtitles) of the Table of Contents of Part II and also of Ch. XIV of Part I, which describes the climates of the Soviet Union. In the rest, only the titles of chapters are translated. The book contains illustrations, maps, weather charts, tables, diagrams.

Table of Contents

Foreword

Pages

3-4

PART I GENERAL CLIMATOLOGY. CLIMATES OF THE WORLD AND OF THE USSR

Ch. I	Introduction (par. 1-3)	5-15
Ch. II	Climatic Radiation Factors (par. 4-12)	15-32
Ch. III	Climatic Circulation Factors (par. 13-16)	32-49
Ch. IV	Effect of Land and Sea on Climate (Marine and Continental Climates) (par. 17-19)	49-58
Ch. V	Effect of Relief on Climate (par. 20-23)	58-67
Ch. VI	Effect of Soil and Vegetation Covers on Climate (par. 24-30)	67-88

2/7